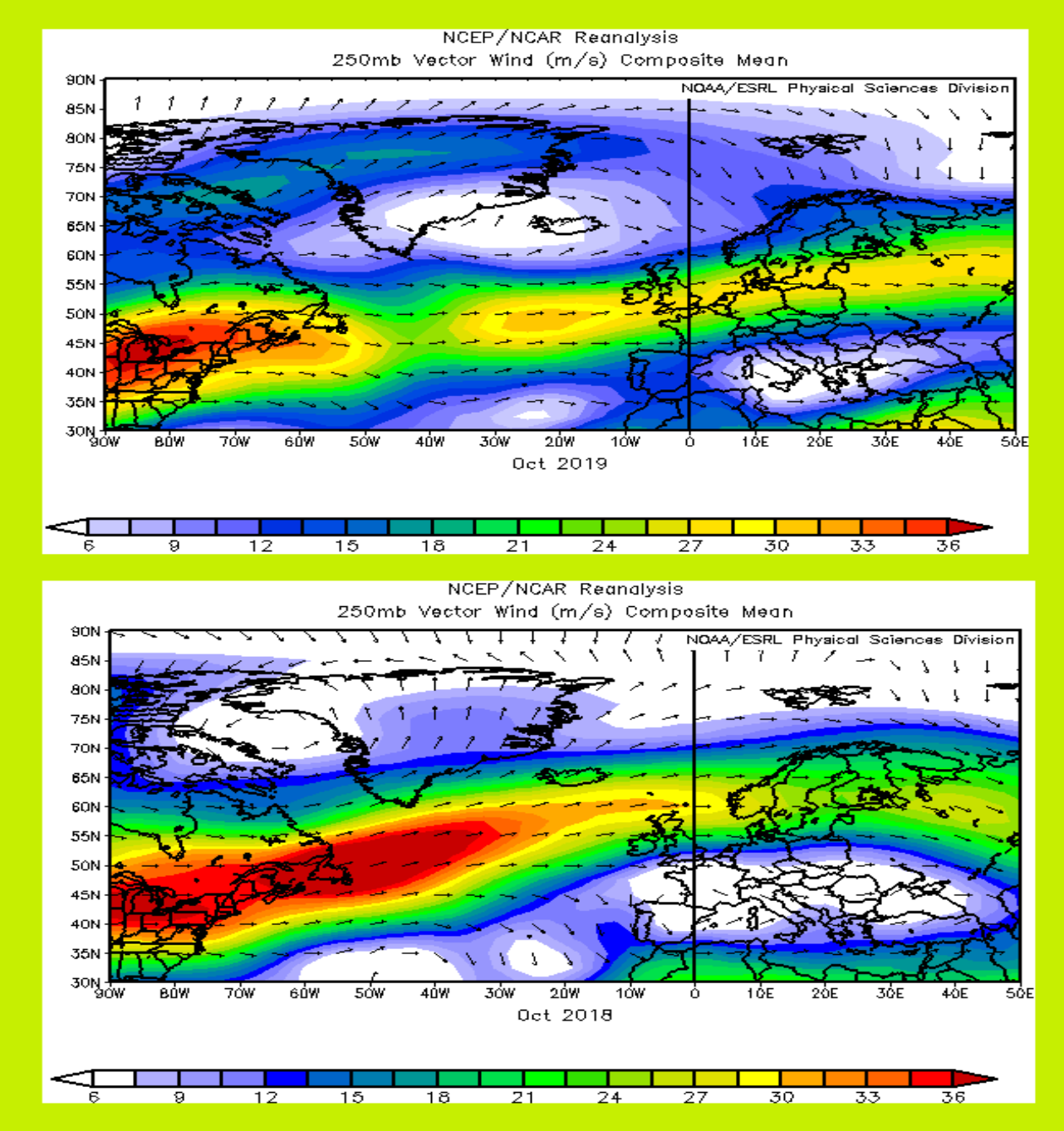
The jet stream casts its shadow over the UK during October

Description

October was an unsettled month, with frequent low-pressure systems influencing the weather of the UK, especially the south.



The above maps show the composite mean for the position of the jet stream during

October 2019 (top) and October 2018 (bottom). Images provided by the NOAA-ESRL Physical Sciences Division, Boulder Colorado http://www.esrl.noaa.gov/psd/

The most notable influence on the month's weather was the more southerly track of the jet stream when compared with an average October. This more southerly position brought more rain to southern parts and drier conditions to northern parts.

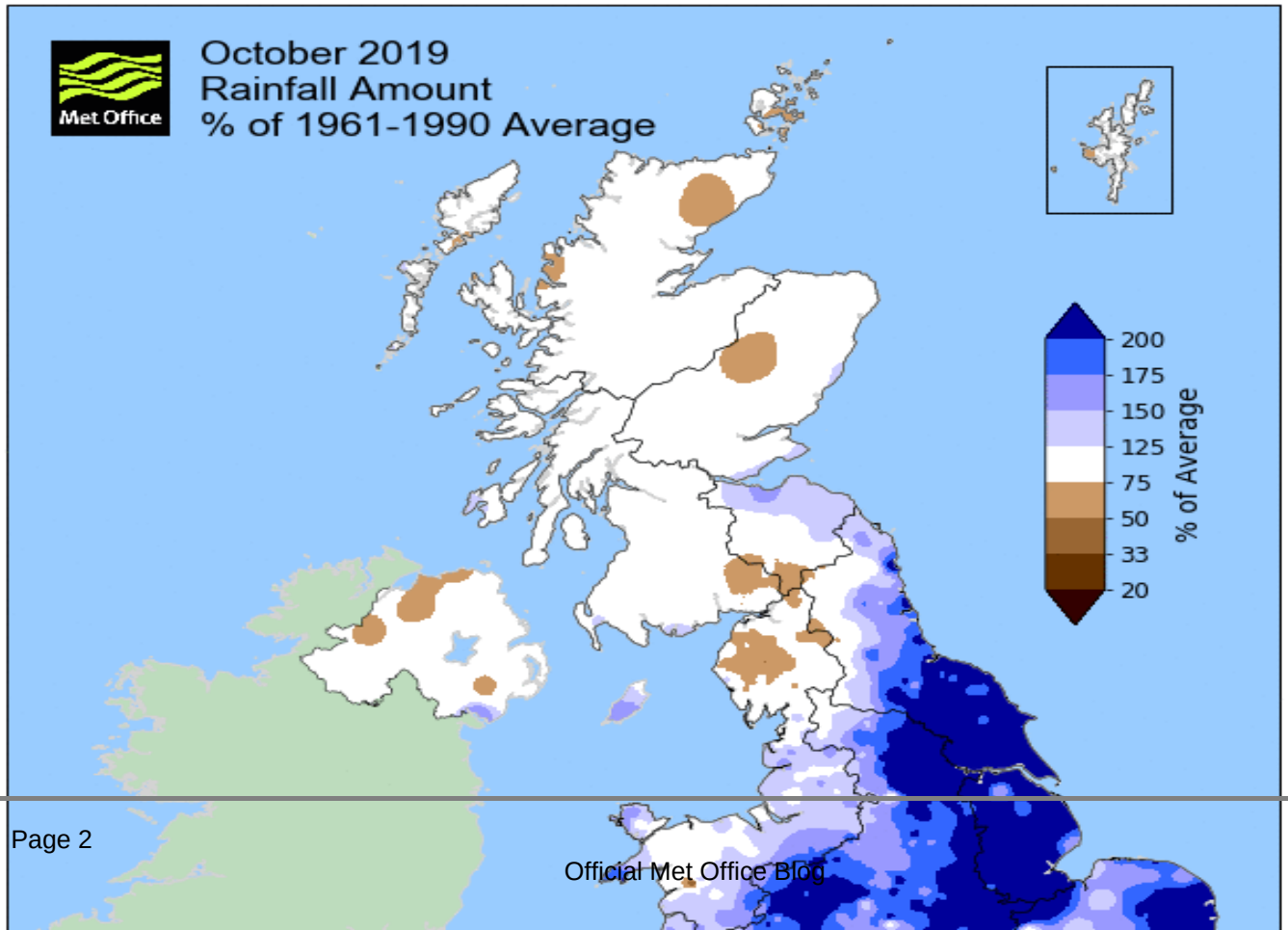
Although there were some calmer spells towards the end of the month, there were days with notable heavy rainfall, with over 100mm falling in 36 hours in the wettest parts of South Wales on the 25th and 26th.

Dr Mark McCarthy is the head of the Met Office's National Climate Information Centre. He said: "The position of the jet stream has a major influence on the UK's weather patterns, especially in autumn. This October, the jet took a more southerly track, steering low-pressure systems towards southern Britain, bringing heavy rainfall to some. By comparison the northern parts of the UK, especially northern Scotland and Northern Ireland, saw less rainfall, more sunshine, but they were also slightly colder on average, reflecting their position on the 'cool' side of the jet stream."

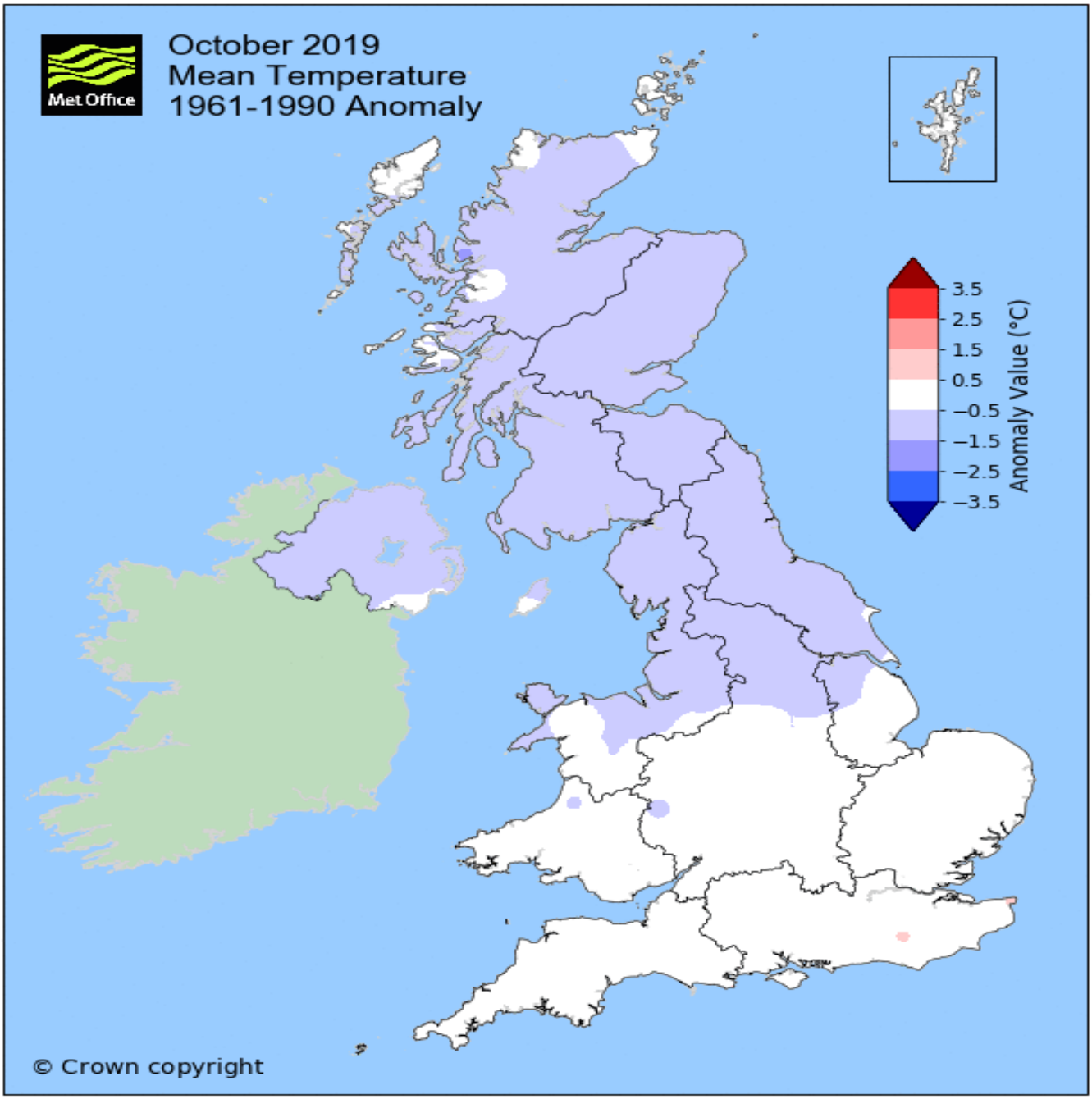
The UK received 109% (138.8 mm) of its average October rainfall. Although it was wetter than average for the UK as a whole, the rainfall was not distributed evenly, with many northern regions and Northern Ireland receiving less than their average monthly totals.

Scotland and Northern Ireland were the only regions in the UK to record drier than average totals for October, with 87% (152.7 mm) and 84% (100.3 mm) respectively. Caithness was the driest historic county, with only 68% (80.9 mm) of its average October rainfall.

Rutland was the wettest compared to average with 177% (113.0 mm) of its monthly total. For the UK as a whole this marks the fifth consecutive wetter than average month.



Temperatures throughout the month were unremarkable, with the nationwide average 0.5°C below the 1981-2010 mean. Each region recorded slightly below average temperatures throughout the month. Only Kent and Sussex were above average in October, and that was only by 0.1°C.



Provisional October 2019	Mean temp (°C)		Sunshine (hours)		Rainfall (mm)	
	Actual	Diff from avg (°C)	Actual	% of avg	Actual	% of avg
UK	9.0	-0.5	87.9	95	138.8	109
England	10.0	-0.4	86.6	84	124.8	136

Wales	9.5	-0.4	78.1	84	198.5	117
Scotland	7.2	-0.8	89.5	118	152.7	87
N Ireland	8.7	-0.7	105.4	120	100.3	84

Date Created
November 2019

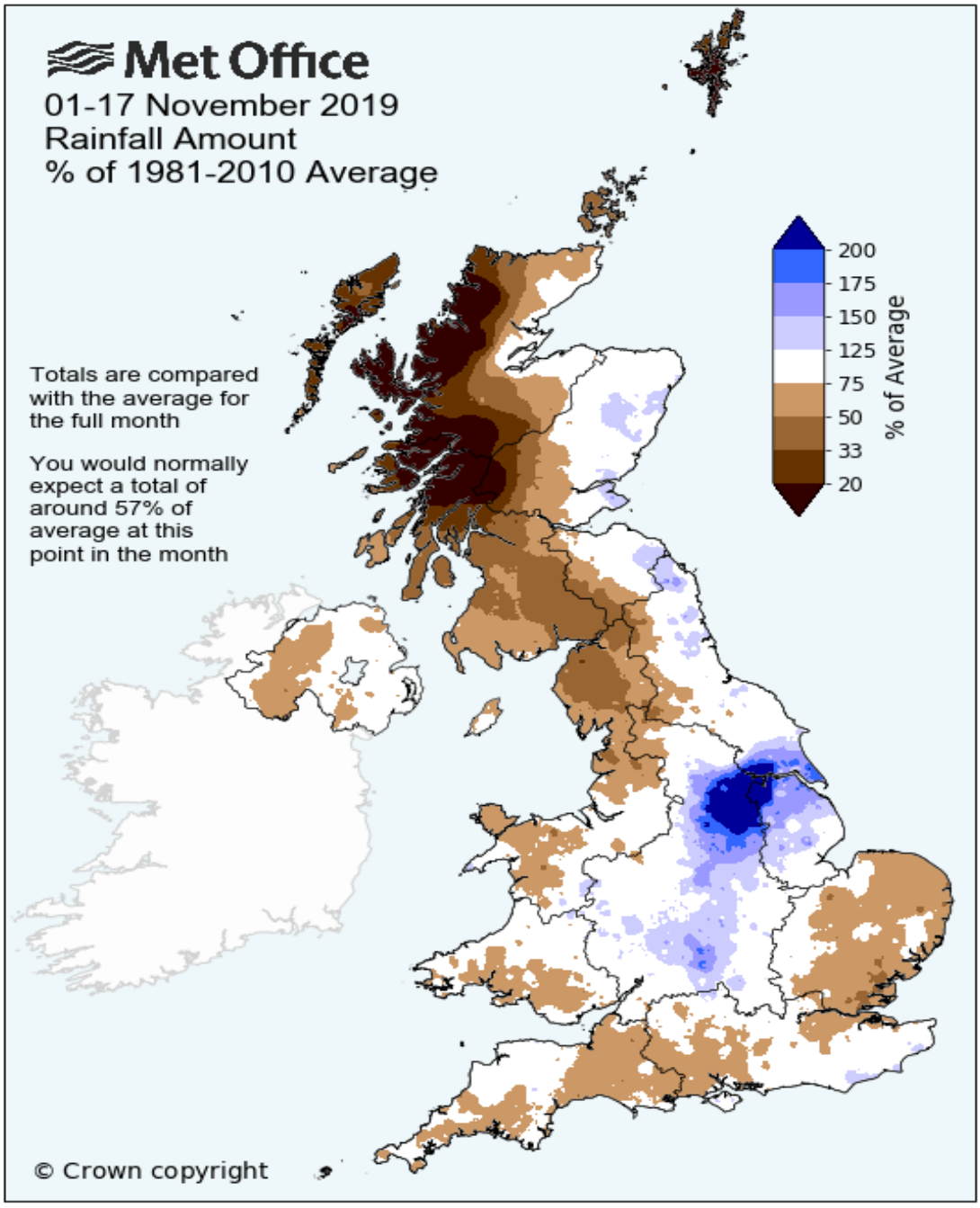
Wet or dry? November mid-month statistics

Description

As we pass through November’s mid-way point, the weather has never been far from many people’s minds with a notably cold and wet start to the month for some.

With statistics up to 17 November, the wet start to the month is very clear to see for some parts of the UK. Overall, the UK has already seen 68% of its average November rainfall. However the distribution of this rainfall has not been even across the UK.

England has been the wettest UK country compared to average seeing 90% of its monthly average already. Nottinghamshire has been the wettest county compared to the long-term 1981-2010 average with 189% of average rainfall (107.8mm). Conversely, western and northern Scotland has been significantly drier compared to its average, with just 17% (23.5mm) of November average rain falling in Shetland so far this month, and Lerwick being the driest location in the whole UK. The distribution of rainfall can be seen in the map below.



Map showing rainfall compared to 1981-2010 average 1-17 November 2019

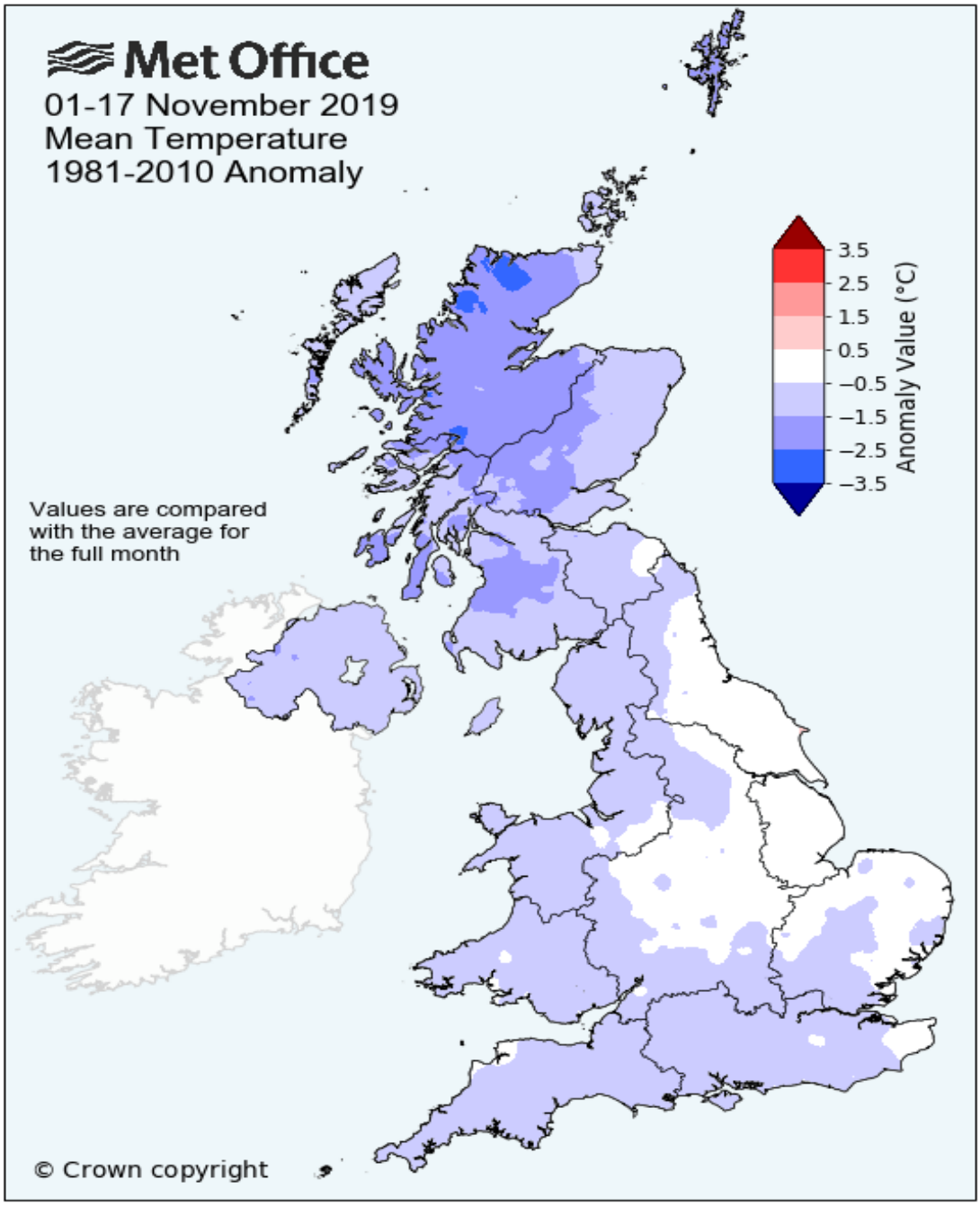
On a more local level, our weather station in Sheffield has already surpassed its autumn record, with 440.8 mm of rainfall this autumn so far. The previous record was set in 2000 with 425.2mm.

Aberdeenshire, Berwickshire, Buckinghamshire, Derbyshire, East Lothianshire, Fifeshire, Forfarshire, Gloucestershire, Herefordshire, Kincardineshire, Leicestershire, Lincolnshire, Northamptonshire, Oxfordshire, Radnorshire, Rutland, Shropshire, Staffordshire, Warwickshire and Worcestershire have all had more than their average monthly totals of rainfall by 17 November.

The cold start is also evident with the UK mean temperature (5.3°C) -0.9°C below the long term 1981-

2010 average for November.

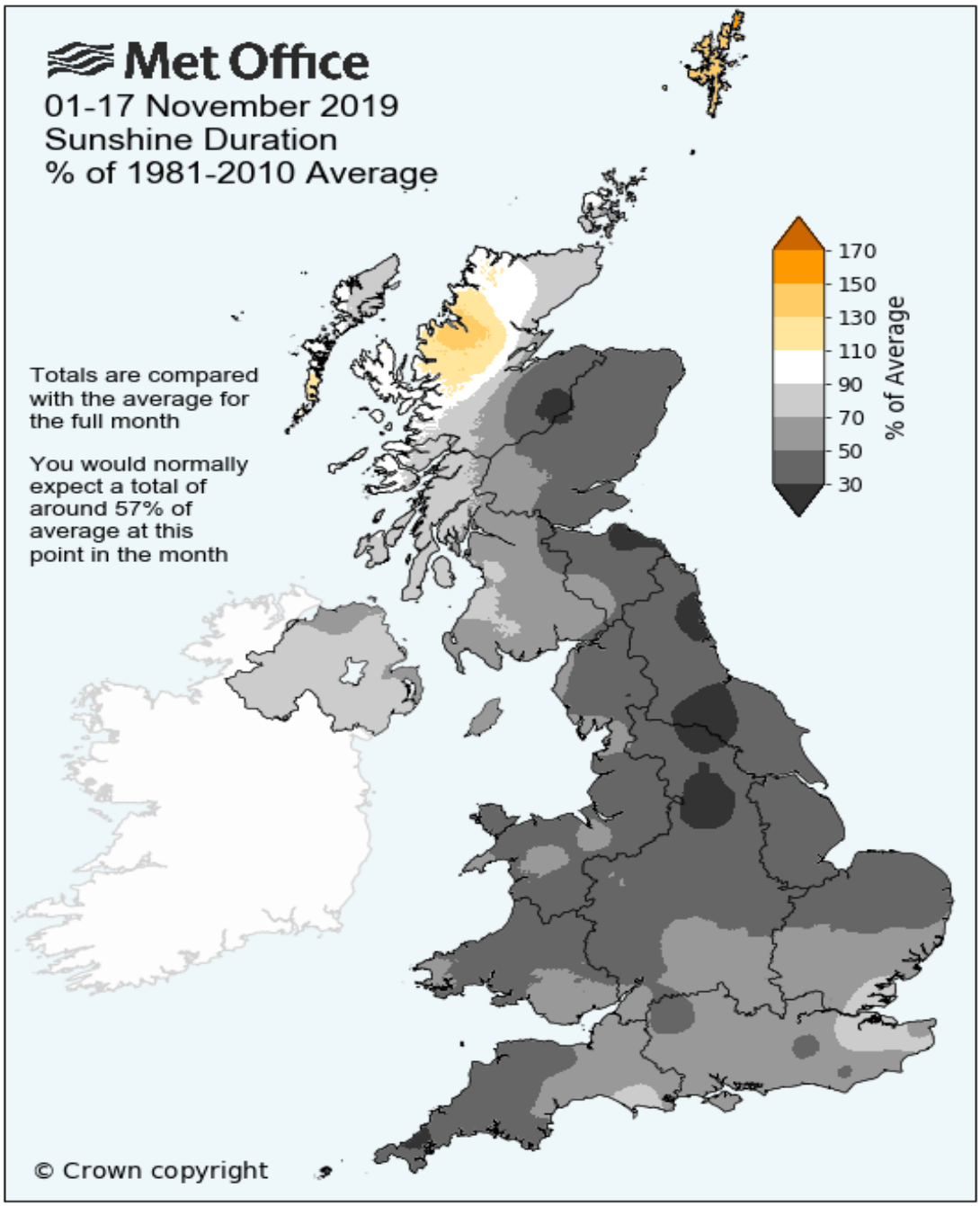
Scotland has been the coldest when compared to the long-term average, -1.6°C below average. Sutherland is the historic county with the lowest temperature compared to the 1981-2010 average where it has been -2.3°C below average through November so far. Central and eastern England are closest to average mean temperature.



Map showing mean temperature compared to 1981-2010 average 1-17 November 2019

As well as being dry compared to average, Shetland has also been notably sunny. Up to 17

November, Lerwick had already recorded 44.8 hours of sunshine, easily surpassing the average for the whole of November (33.8 hours). To compare this to a location in the south east, Manston in Kent has only recorded 47.2 hours. This is significant considering that Shetland has a little over one hour less daylight compared to Kent at this time of year.



Map showing sunshine hours compared to 1981-2010 average 1-17 November 2019

Provisional 1-17 November 2019	Mean temp (°C)	Sunshine (hours)	Rainfall (mm)

	Actual	Diff from avg (°C)	Actual	% of avg	Actual	% of avg
UK	5.3	-0.9	81.7	68	30.2	53
England	6.3	-0.6	79.5	90	30.2	47
Wales	5.9	-0.8	127.3	79	27.3	49
Scotland	3.4	-1.6	72.2	44	29.2	64
N Ireland	5.3	-1.2	88.1	79	39.5	74

Date Created
November 2019